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CASE

OF

MYXOMATOUS DEGENERATION OF THE CHORION;

PROFUSE HÆMORRHAGE; TRANSFUSION; RECOVERY.

BY

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CASE OF MYXOMATOUS DEGENERATION OF THE CHORION, ETC.

THE symptoms and pathology of myxomatous degeneration of the ovum have been well and fully described. We propose to draw your attention to one clinical fact in connexion with this condition. The case which we now record is remarkable at once for the severity of the subjective symptoms of pregnancy; for the serious hæmorrhage which the condition involved; and, lastly, for the fact that the prompt interference by transfusing eight ounces of blood seemed unquestionably to be the means of saving the patient's life. The record of the case is as follows:—

Janet Davis, 26 years of age, was admitted to Ward XXVIII. on the 8th January 1887, suffering from hæmatemesis and exhaustion. Hæmatemesis to a greater or less extent has existed for six weeks. She menstruated last in the end of September 1886; since then she has had irregular uterine hæmorrhages, which culminated in the middle of December in a very profuse flooding. From then till now she has been bleeding constantly. She is quite exsanguine, very weak, pulse thready, and vomiting so intensely that she is unable to retain anything either fluid or solid.

On examining the abdomen there is found to be a well-marked tumour occupying the middle line extending to three fingers breadth above the umbilicus. The mammæ present all the usual indications of pregnancy, and the umbilicus is pigmented. The consistence of the swelling is elastic and movable.

Percussion dull, and a well-marked souffle heard all over the tumour.

Per vaginam, the os was found soft and patulous, and the bimanual examination showed a boggy soft tumour with well-marked vaginal pulsation. The least examination caused much pain and great hæmorrhage. From the unusual size of the pregnant uterus, the hæmorrhage, the loud bruit all over, and the consistence of the tumour, with the absence of fœtal parts, the diagnosis arrived at was a vesicular mole.

The vomiting increased in severity, and the hæmatemesis became very urgent. It was therefore determined to bring on labour as quickly as possible, and empty the uterus. With this object a tupelo tent was introduced in the afternoon and a firm plug beneath it. On the following day the tent was removed, accompanied by very profuse hæmorrhage, the cervix being only slightly dilated. The pulse of the patient was uncountable. She was sighing, gasping, and restless, with all the other ordinary signs of approaching death from hæmorrhage. The vagina was therefore plugged, copious ether and brandy injections were administered, and the patient left in the operating room. Her condition was so critical it was deemed unsafe to move her in any way. On the evening of January the 16th, her condition being if anything rather worse, it was determined, as a *dernier ressort*, to transfuse her, and eight ounces of blood were introduced into her circulation by the following method.

The operation was performed according to the manner recently recommended by Mr John Duncan. The donor was Mr J. W. Mitchell. The median basilic vein of the left arm having been chosen as being most prominent, it was exposed for about an inch of its course. Two ligatures of carbolized catgut were then passed under the vein with an aneurism needle, and tied in a loose knot, leaving the vein uncompressed. The vein having been then opened in the interval between the two ligatures, a glass canula, two inches in length, with an inch of rubber tubing at its free end, was immediately slipped into the opening and pushed for about an inch into the vessel. The proximal ligature was then tightened over the tube in the vein so as to keep it in position, the lower ligature being also drawn tight, occluding the distal portion of the vein. The end of the canula was now clamped.

The blood of the donor was received into a graduated glass vessel containing a little of the phosphate solution, and floating in a larger vessel of hot water kept a little above the body temperature. As the blood flowed into the vessel, phosphate solution at a temperature of 100° F. was slowly added, and the mixture gently stirred with a glass rod. A large glass syringe holding three or four ounces, previously warmed and folded round with hot flannel, was then filled with the mixture, and any bubbles of air carefully excluded.

The clamp being now removed from the vein of the patient, and the blood allowed to fill the canula, the nozzle of the syringe was slipped into the end of the rubber tube of the canula, and the blood injected very slowly and steadily into the vein. When the syringe was emptied, the end of the canula being nipped, it was withdrawn and replaced by a second syringe already filled. The introduction of the blood would take upwards of ten minutes.

Eight ounces of the mixture were injected, containing 5½ ounces of blood and 2½ ounces of phosphate solution.

The canula was then withdrawn from the vein, and the ligature which had held it in position tightened, and the wound in the skin having been sutured, a pad of corrosive sublimate wool was applied.

The phosphate of soda solution used was prepared by boiling one pint of distilled water on three occasions at intervals of twenty-four hours. To this one ounce of phosphate of soda in large crystals, which had been kept dry in a stoppered bottle, was added just before the solution was needed, dissolving quite readily at the body temperature. The solution is kept at the proper temperature at the time of operation by a thermometer introduced into the flask. The phosphate solution is thus = 1 in 20 of water. One part of the solution to three of blood will prevent coagulation for some time, and this is the proportion recommended, but more of the phosphate solution in proportion may be added if thought advisable.

Before being used, the syringe, vessels, glass rod, etc., should be immersed in corrosive sublimate lotion for some time and then washed out with hot boiled water. To insure perfect safety also, the dissection of the patient's vein should be performed with all antiseptic precautions.

On the following day there was well marked jaundice; the patient had still a very rapid pulse, but was somewhat improved. Ether was administered, the plug removed, the cervix dilated with the hand, and the uterus forcibly cleared out. The contents consisted of the characteristic cysts, with copious blood-stained fluid and blood-clot. The amount filled an ordinary wash-hand basin. There was profuse intrauterine hæmorrhage, which was controlled first of all by direct application of antiseptic hot douche, and secondly, by perchloride of iron. After the intra-uterine hæmorrhage had ceased, it was found that hæmorrhage was still going on from the torn cervix, which was controlled by firm vaginal plugging. The patient was removed to the Ward almost articulo mortis. Next morning, the 18th of January, the jaundice had faded, her condition generally had improved. Careful intrauterine antiseptic washing was carried out, and in the beginning of February she went out quite well.

This case seems to us to offer various points of interest. (1.) The method by which the transfusion here was performed seems to us an easy and ready method by which it can be adopted with advantage in obstetrics. Post-partum hæmorrhage and placenta prævia appear to us the main conditions in which this operation is specially indicated, but in both of those cases the want of a ready means of transfusion render the application of this remedy impossible. But, secondly, this case shows what

most of us must have observed in all acute uterine hæmorrhage, namely, the immediate value of an increase to the volume of the circulating fluid. This can be obtained without recourse to the method we have just described, by the simple injection of salt and water in the following manner:—

In a case of emergency, such as post-partum hæmorrhage or placenta prævia, a teaspoonful of ordinary table-salt to a pint of water boiled and cooled down to about 100° F. is all that is necessary; any syringe that is at hand will be found quite suitable and safe.

If there is time to get a solution prepared, the following will be found satisfactory:—

(1.) Six per mille solution of sodium chloride.
One per mille solution of sodium carbonate.

(2.)

Sodium chloride, . .	grs. 50	Two drachms of pure alcohol to be added.
Potassium chloride, .	grs. 3	
Sodium sulphate, . .	grs. 2–5	
Sodium carbonate, . .	grs. 2–5	
Sodium phosphate, .	grs. 2	
Aquæ, ...	1 pint	

(3.)

Sodium chloride, . .	grs. 60
Potassium chloride, .	grs. 6
Sodium phosphate, .	grs. 3
Sodium carbonate, . .	grs. 20
Aquæ, ...	1 pint

Barnes in his obstetrical operations suggests one teaspoonful of sodium chloride with half a teaspoonful of sodium carbonate to the pint of water at 100° F. Dr Edward Carmichael suggests that it might be advantageous to use the syphon action for simple saline injections. If the canula were attached to one of Foulis's cans for washing out the bladder, or the can of an ordinary vaginal douche with about four yards of tubing attached, a continuous stream could be got with whatever might be thought desirable. A considerable amount of heat would, no doubt, be lost while the fluid passes through the tubing. If such were the case, of course the solution would require to be made the warmer.

With regard to the amount to be injected, Dr Edward Carmichael has made a précis of a large number of cases, and he finds that the amount varies from one to four pints. Schwartz puts the amount down at about eighteen ounces.

There is one point which must be carefully noted, viz., that when blood is used a comparatively small quantity, say six to eight ounces, is enough; while with the saline, as has just been shown, a much larger quantity is required.

We feel sure that in the treatment of placenta prævia, plugging and transfusion in extreme cases before operative measures have been had recourse to will sometimes save a life. One such case has certainly come within our observation in the practice of the Maternity Hospital, where the injection of a saline fluid after firm plugging rallied the patient so far as to render manipulative interference possible. Of course the effects of these saline solutions are but temporary; but as it is only a temporary advantage we desire to gain in order to enable us to effectually stop the hæmorrhage by manipulative interference, they are efficient. There can be no doubt that many cases of placenta prævia are lost by interference while the patient is completely collapsed from loss of blood. In such cases there are three alternatives,—1st, To plug, wait, and administer stimulants; 2nd, To turn, deliver partially, leave the child's body as a plug, stimulate and wait; and, lastly, as an adjunct to either of these, to transfuse either in the way we have described in the foregoing case, or with a saline solution.

In the case of post-partum hæmorrhage, the obvious disadvantage is that it occurs usually without any warning, and is so rapidly fatal that no opportunity for transfusion occurs. Still cases of prolonged post-partum hæmorrhage, as after labour with twins, uterine inertia, or secondary post-partum hæmorrhage, offers fair scope for the use of transfusion. For in obstetrics it must always be borne in mind that all we want is a temporary advantage, a temporary rally to give us sufficient time to adopt methods of radical cure, and we feel sure that in transfusion we have such a remedy.

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